
PART I - ADMINISTRATIVE

Section 1. General administrative information

Title of project

Securing Wildlife Mitigation Sites - Oregon, Horn Butte

BPA project number: 20116

Contract renewal date (mm/yyyy): ☐ Multiple actions?

Business name of agency, institution or organization requesting funding

Oregon Department of Fish and Wildlife

Business acronym (if appropriate) ODFW

Proposal contact person or principal investigator:

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NPPC Program Measure Number(s) which this project addresses

11.3A, 11.3D

FWS/NMFS Biological Opinion Number(s) which this project addresses

Other planning document references

1. Oregon Trust Oregon Trust Agreement Planning (OTAP) Project
 2. BPA Wildlife Mitigation Program Final EIS
 3. BPA Watershed Management Program Final EIS
 4. Assessing OTAP Project Using GAP Analysis
 5. USFS Status of the interior Columbia Basin: summary of scientific finding
 6. CTUIR Wildlife Mitigation Plan for the John Day and McNary Dams, Columbia River Basin
 7. CTWSRO Integrated Resource Management Plan
 8. ODFW District Wildlife Management Plans
 9. Wy Kan Ush Me Wa Kush Wit, CRITFC
 10. CBFWA Guidelines for Enhancement, Operations, and Maintenance for Wildlife Mitigation Projects
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Short description

Protect and enhance bunch grass and shrub-steppe habitats through alteration of land use practices and control of noxious weeds on acquired and eased lands. Develop cooperative management plan for adjacent BLM lands and ease other adjacent public lands.

Target species

Western meadowlark and California quail

Section 2. Sorting and evaluation**Subbasin**

Lower Mid-Columbia Mainstem Subregion

Evaluation Process Sort

CBFWA caucus	Special evaluation process	ISRP project type
Mark one or more caucus	If your project fits either of these processes, mark one or both	Mark one or more categories
<input type="checkbox"/> Anadromous fish <input type="checkbox"/> Resident fish <input checked="" type="checkbox"/> Wildlife	<input type="checkbox"/> Multi-year (milestone-based evaluation) <input type="checkbox"/> Watershed project evaluation	<input type="checkbox"/> Watershed councils/model watersheds <input type="checkbox"/> Information dissemination <input checked="" type="checkbox"/> Operation & maintenance <input type="checkbox"/> New construction <input type="checkbox"/> Research & monitoring <input checked="" type="checkbox"/> Implementation & management <input checked="" type="checkbox"/> Wildlife habitat acquisitions

Section 3. Relationships to other Bonneville projects

Umbrella / sub-proposal relationships. List umbrella project first.

Project #	Project title/description
9705900	Securing Wildlife Mitigation Sites - Oregon
20114	Securing Wildlife Mitigation Sites - Oregon, Ladd Marsh WMA Additions
	Securing Wildlife Mitigation Sites - Oregon, McKenzie River Islands
	Securing Wildlife Mitigation Sites - Oregon, E.E. Wilson WMA Additions
	Securing Wildlife Mitigation Sites - Oregon, Multnomah Channel
	Securing Wildlife Mitigation Sites - Oregon, Ruthton Point (Mitchell Point)
	Securing Wildlife Mitigation Sites - Oregon, Trout Creek Canyon
20115	Securing Wildlife Mitigation Sites - Oregon, Irrigon WMA Additions
20112	Securing Wildlife Mitigation Sites - Oregon, Wenaha WMA Additions
20113	Securing Wildlife Mitigation Sites - Oregon, South Fork Crooked River
	Juniper Canyon and Columbia Gorge Wildlife Mitigation Project

20140	Tualatin River National Wildlife Refuge Additions
9802200	Acquisition of Pine Creek Ranch
20134	Acquire Oxbow Ranch - Middle Fork John Day
20090	Securing Wildlife Mitigation Sites - Oregon, Logan Valley

Other dependent or critically-related projects

Project #	Project title/description	Nature of relationship
9705900	Securing Wildlife Mitigation Sites - Oregon	Umbrella project; explains intent for mitigation planning, coordination, and implementation by Oregon wildlife managers within Oregon. Identifies priority projects with specific budgets that will help meet mitigation objectives.
new	ODFW Mainstem Umbrella Proposal	Umbrella project; explains management intent for anadromous and resident fish and wildlife in and along the mainstem Columbia and Snake rivers.
9565	Assessing Oregon Trust Agreement Using GAP Analysis	A mitigation planning tool used to analyze and rank potential mitigation projects within the basin.
9284	Oregon Trust Agreement Planning Project	A mitigation planning tool that includes methods for assembling a trust agreement and a list of potential mitigation projects.
9009200	Wanaket Wildlife Mitigation Project Operations & Maintenance	A project proposal that addresses similar habitats and species. Enhancement techniques and results will be shared.
9206800	Implementation of Willamette Basin Mitigation Program - Wildlife	A mitigation proposal focusing on land acquisition/easement, enhancement, and management of lands in the Willamette Basin. Similar in function as Coalition's umbrella project.

Section 4. Objectives, tasks and schedules

Past accomplishments

Year	Accomplishment	Met biological objectives?
1993	Created a list of potential wildlife mitigation projects throughout Oregon	
1997	Compiled more comprehensive	

	prioritized list of mitigation sites; identified Horn Butte area as priority area	
1998	FY99 proposal for \$1,000,000 to acquire and/or ease lands in the Horn Butte area was approved and recommended	
1998	Began landowner negotiations for land acquisition and/or conservation easement and cooperative management of public land at Horn Butte	
1998	Developed partnerships with BLM Prineville District Office, Clearwater Land Exchange, Trust for Public Lands, and The Nature Conservancy that will help facilitate project objectives	

Objectives and tasks

Obj 1,2,3	Objective	Task a,b,c	Task
1	Assess Habitat Conditions/ Develop Management Plans	a	Assess existing habitat conditions and restoration needs and opportunities on 7,000 acres of acquired and/or eased lands and enhancement opportunities on adjacent public lands
		b	Develop Restoration Plan
		c	Develop Operations and Maintenance Plan
		d	Develop Monitoring and Evaluation Plan
2	Restore Habitat Values - Implement Restoration Plan	a	Alter livestock grazing practices
		b	Implement noxious weed control
		c	Plant native grasses and shrubs
		d	Secure public access
3	Maintain Habitat Values - Implement Operations and Maintenance Plan	a	Conduct habitat enhancement activities as necessary to maintain habitat values
		b	Maintain fences and gates
		c	Maintain informational signs
4	Measure Effectiveness of Restoration Plan - Implement Monitoring and Evaluation Plan	a	Evaluate changes in habitat conditions using HEP survey methods, plant survey methods, and photo points
		b	Compare noxious weed infestation

			levels to pre-control survey
		c	Conduct biological monitoring to assess species response
5	Acquire/Ease Additional Lands in Horn Butte Area	a	Ease up to 22,000 acres of adjacent public lands

Objective schedules and costs

Obj #	Start date mm/yyyy	End date mm/yyyy	Measureable biological objective(s)	Milestone	FY2000 Cost %
1	08/1999	12/2000	Assessment of existing conditions; development of Restoration Plan, O&M Plan, and M&E Plan		17.00%
2	10/1999	01/2003	Restore wildlife habitats; Provide enhancement credit HUs		7.00%
3	10/1999	12/2004	Maintain protection and enhancement credit HUs		3.00%
4	10/1999	12/2004	Habitat/Biological monitoring		3.00%
5	10/1999	12/2000	Conservation easement agreement for management and enhancement of adjacent public lands	x	70.00%
				Total	100.00%

Schedule constraints

Difficult landowner negotiation efforts and inadequate or untimely fund acquisition could delay project implementation. Severe weather conditions could delay field activities.

Completion date

Development of plans - FY2000

Habitat restoration - FY2003

O&M and M&E - ongoing, the NPPC's FWP requires BPA to provide adequate O&M funding to sustain the project as long as the hydrosystem operates (NPPC 1994, Measure 11.2C.1)

Easement - FY2000

Section 5. Budget

FY99 project budget (BPA obligated): \$1,000,000

FY2000 budget by line item

Item	Note	% of total	FY2000
Personnel	0.25 FTE	% 3	11,598
Fringe benefits	@ 38%	% 1	4,407
Supplies, materials, non-expendable property	fence, weed control, sign, and other materials	% 1	5,000
Operations & maintenance	incorporated into personnel and subcontractor line items	% 0	
Capital acquisitions or improvements (e.g. land, buildings, major equip.)	conservation easement of up to 22,000 acres	% 90	400,000
NEPA costs		% 1	5,000
Construction-related support		% 0	
PIT tags	# of tags:	% 0	
Travel		% 1	3,000
Indirect costs	@ 35.5%	% 2	10,297
Subcontractor	Gilliam Co. Weed Control (O&M)	% 1	3,000
Other	Restoration and M&E activities are incorporated into the personnel line item	% 0	
TOTAL BPA FY2000 BUDGET REQUEST			\$442,302

Cost sharing

Organization	Item or service provided	% total project cost (incl. BPA)	Amount (\$)
BLM	Assistance in management plan development, and enhancement and O&M activities (fencing and weed control) likely; no cost-sharing agreement is currently in place	% 0	
Others undetermined at this time	Opportunities will be investigated during restoration plan development	% 0	
		% 0	
		% 0	
Total project cost (including BPA portion)			\$442,302

Outyear costs

	FY2001	FY02	FY03	FY04
Total budget	\$90,000	\$85,000	\$70,000	\$50,000

Section 6. References

Watershed?	Reference
<input type="checkbox"/>	Beak Consultants, Inc. 1993. Audit of wildlife loss assessments for federal dams on the Columbia River and its tributaries. Prepared for the NPPC, Portland, OR.
<input type="checkbox"/>	BPA. 1993. OR Trust Agreement Planning Project: Potential mitigation to the impacts on OR wildlife resources associated with relevant mainstem Col. R. and Willamette R. hydroelectric projects. BPA, U.S. Dept. of Energy, Portland, OR. DOE/BP-299-1. 53pp.
<input type="checkbox"/>	BPA. 1997a. Watershed management program final environmental impact statement. DOE/EIS - 0265. BPA, Portland, OR.
<input type="checkbox"/>	BPA. 1997b. Wildlife mitigation program final environmental impact statement. DOE/EIS - 0246. BPA, Portland, OR.
<input type="checkbox"/>	BPA. 1997c. Wildlife mitigation program record of decision. DOE/EIS - 0246. BPA, Portland, OR.
<input type="checkbox"/>	Northwest Power Act. 1980. Pacific Northwest electric power planning and conservation act, with index. BPA, U.S. Dept. of Energy. 40 pp.
<input type="checkbox"/>	Northwest Power Planning Council. 1994. Columbia Basin Fish and Wildlife Program. NPPC 94-55. NPPC, Portland, OR. January 1994.
<input type="checkbox"/>	ODFW 1997. Assessing OTAP Project Using GAP Analysis. In fulfillment of Project Number 95-65, Contract Number DE-BI179-92BP90299. Prepared for: BPA; Project Cooperators: USFW, CTUIR, CTWSRO, BPT, Oregon Natural Heritage Program, Portland, OR.
<input type="checkbox"/>	Prose, B., Farmer A., and Olson R. 1986. Cost-effectiveness of easement and fee title acquisition for mitigating wildlife habitat losses. USDI, USFWS, Nat. Ecol. Center, Fort Collins, CO. 61 pp.
<input type="checkbox"/>	Rasmussen, L. and P. Wright. 1990. Wildlife impact assessment, John Day Project, Oregon and Washington. Prepared by USFWS for U.S. Dept. of Energy, BPA, Portland, OR. 47pp.

PART II - NARRATIVE

Section 7. Abstract

This project, one of many proposed by the Oregon Wildlife Coalition, is considered an ongoing acquisition and enhancement project under the *Securing Wildlife Mitigation Sites - Oregon* project (Umbrella Project 9705900) as it was recommended for FY1999 funding. This proposal explains the management objectives for wildlife and wildlife

habitat as they relate to the proposed project and describes the link between this project and others proposed under the Coalition's umbrella project.

The Oregon Wildlife Coalition is proposing to permanently protect and enhance approximately 32,000 acres of shrub-steppe and native bunch grass habitat in the Horn Butte area, which is near the town of Arlington on the mainstem Columbia River. The project will involve a mix of private and public lands. Two private parcels (totaling about 7,000 acres) have been identified for possible acquisition and conservation easement. About 4,300 acres of adjacent Bureau of Land Management lands may be enhanced in coordination with wildlife mitigation activities on the private lands. Up to 22,000 acres of public lands may be available for conservation easement. A proposal to acquire and/ease one or both of the private parcels was submitted in 1998 for FY99 BPA funds. The Council approved the proposal in September 1998.

This proposal addresses Phase II of the Horn Butte project: assessment of habitat conditions; development of management plans (for acquired and/or eased lands and adjacent BLM lands); implementation of restoration, operation and maintenance, and monitoring and evaluation activities; and easement of up to 22,000 acres of additional public land.

The overall goal of this project is to provide large, contiguous tracts of native shrub-steppe habitat for the benefit of wildlife, especially species who only inhabit these types of shrub-steppe and grassland habitats. Less than 1 % of the eco-region in which the two properties of interest lie is managed with wildlife protection and enhancement as a priority. Even less than 1% of the native shrub-steppe habitat remains in the entire eco-region. This is primarily due to irrigated and dry-land agricultural conversion, but also to inundation of the Columbia River and associated urban expansion.

Habitat protection and enhancement will be achieved by developing and implementing restoration activities. Restoration of this property will entail the removal and/or management of the grazing which is presently altering the site, control of noxious weeds, and planting of native grasses and shrubs. Other techniques aimed at revitalizing this rare habitat type in Oregon will likely be implemented. The project will likely involve the development of a cooperative management plan with the Bureau of Land Management (BLM) who owns lands of similar type and condition adjacent to the project site. A conservation easement may be pursued on up to 22,000 acres.

The proposed acquisition and enhancement properties are about 30 miles upstream from the John Day hydroelectric facility. Key habitats and cover types provided by the project area include shrub-steppe, native bunchgrass grassland, and riparian habitats. This project will help achieve the wildlife mitigation goal of fully mitigating for wildlife losses caused by the construction and operation of the hydropower system in the Columbia River Basin as outlined in the NPPC's Wildlife Program (NPPC 1994, Section 11.1). Shrub-steppe and riparian habitat types are high priority habitat types in the Upper Mid-Columbia subbasin (NPPC 1994, Table 11-2). An estimated 2,000 – 3,500 protection and enhancement Habitat Units will be gained from this project by the year 2004.

Mitigation target species for the John Day Dam (to which mitigation credits will likely be applied) that will benefit from this project are California quail, western meadowlark, . Many other species of concern occur on or near the project site and will benefit from habitat protection and restoration activities, including long-billed curlew, ferruginous hawk, Swainson's hawk, burrowing owl, loggerhead shrike, grasshopper sparrow, sagebrush lizard, and Washington ground squirrel.

Results of project restoration and enhancement activities will be monitored and evaluated using Habitat Evaluation Procedures protocols for the above mentioned mitigation target species, as well as for plant communities determined at a later time to be indicative of habitat quality. Photo monitoring, as well as biological monitoring of certain wildlife species and plant communities, will occur to measure changes in habitat quality and corresponding species responses.

Section 8. Project description

a. Technical and/or scientific background

The development of the hydrosystem inundated wildlife habitats and affected many species of wildlife (NPPC 1994). The Northwest Power Act of 1980 established and charged the NPPC with the task of developing a comprehensive fish and wildlife program to protect, mitigate, and enhance fish and wildlife habitat in the Columbia Basin (Northwest Power Act, Section 4(H)(1)(A); NPPC 1994, Section 2). The Northwest Power Act also authorized and obligated BPA to fund implementation of mitigation projects consistent with the NPPC's FWP mitigation goals and objectives.

Hydrosystem impacts were assessed in the mid-1980s. These impacts have been independently audited and verified (Beak 1993) and were amended into the NPPC's FWP as unannualized construction losses (NPPC 1994, Section 11.3A.1). The wildlife impact assessment (Rasmussen and Wright 1990) estimated the loss of 36,555 HUs as a result of the construction of the John Day hydroelectric facility. Riparian/riverine, shrub-steppe, wetland, and island habitats were lost.

In 1992, the Oregon Trust Agreement Planning (OTAP) Project was initiated by the Oregon Wildlife Coalition (OWC) to create a list of potential wildlife mitigation opportunities by priority and to attempt to determine the costs of mitigating for wildlife losses in Oregon. Using Council and OWC developed criteria, this project resulted in a prioritized list of 287 potential mitigation sites and cost estimates for general habitats within the mitigation area (BPA 1993). For more information on the OTAP Project see the Oregon Wildlife Coalition's *Securing Wildlife Mitigation Sites – Oregon* umbrella project proposal (Project 9705900) . The OTAP was later refined in 1995 using GAP Analysis techniques. The primary goal of the project was to prioritize and depict the contribution of each proposed mitigation site to target species and habitats as well as overall biodiversity in the state and/or eco-region within which it is found. From the results of this project (ODFW 1997), Oregon wildlife managers cooperatively identified and ranked a short list of higher priority sites, one of which was the Horn Butte area. For

more information on the OWC's GAP Analysis project see the *Securing Wildlife Mitigation Sites – Oregon* umbrella project proposal.

The Horn Butte area is a high priority site because it is some of the best remaining native shrub-steppe habitat in the state of Oregon. Less than 1% of the native shrub-steppe habitat remains in the eco-region. This is primarily due to irrigated and dry-land agricultural conversion, but also due to inundation of the Columbia River and associated urban expansions.

The two private properties of interest in the Horn Butte area have been degraded by grazing practices and infestations of noxious weeds (e.g., cheatgrass, yellowstar thistle, knapweed). Perennial tributaries to Willow Creek flow through the properties; water quality, riparian habitat conditions, and streambed conditions have been impacted by livestock.

The BLM owns and manages about 4,300 acres adjacent to the private properties of interest. Although this tract is managed to maintain native shrub-steppe and grassland habitats and associated wildlife species, there are grazing allotments on it which are causing some habitat degradation.

Adjacent public lands on what is known as the Boeing Tract may be available for easement. This area is one the largest remaining tracts of native shrub-steppe habitat in the entire Columbia Basin. The shrub-steppe is in excellent condition. There may be an opportunity to ease a portion of the tract, protecting it from possible future agriculture and grazing practices. Up to 22,000 acres may be available for conservation easement.

Restoration of the Horn Butte project site is needed to prevent: 1) a decrease in the overall quality and quantity of wildlife habitat on the site, 2) a decrease in native wildlife and plant species diversity, and 3) an increase in invasive non-native plant and wildlife species. It is expected that without enhancement and maintenance activities, habitat conditions for many wildlife species will decrease in both quality and quantity, resulting in loss of food availability, cover, and nesting sites for those wildlife species which are closely tied to shrub-steppe habitats. Failure to fund restoration activities may limit the restoration efforts already in place on adjacent BLM lands. There are few opportunities to protect and enhance these habitat types in areas where very little other protection and enhancement is taking place. Much of the last remaining shrub-steppe habitat in the State will be preserved for wildlife.

Implementation of the Horn Butte project will help the Council meet their wildlife mitigation objectives and provide partial mitigation for losses associated with the construction of the John Day hydroelectric facility. The Horn Butte project will protect and enhance shrub-steppe and riparian habitats, both of which are considered high priority habitat types (NPPC 1994, Table 11-2). The project will provide protection and enhancement HUs for western meadowlark and California quail.

b. Rationale and significance to Regional Programs

The Horn Butte project is consistent with the NPPC's FWP goal to achieve and sustain levels of habitat and species productivity as a means for fully mitigating wildlife losses caused by construction and operation of the federal and non-federal hydroelectric system (NPPC 1994, Section 11.1). The project is also consistent with the specific principles outlined in Section 11.2D.1 of the FWP:

Least costly way to achieve the biological objective

The Horn Butte project will permanently provide benefits to wildlife primarily through land acquisition, but also through easement of private land and enhancement of adjacent public lands. According to a study that compared various mitigation methods, fee title acquisition and subsequent management is generally more cost effective than easement (Prose et al. 1986). The Oregon Trust Agreement Planning (OTAP) Project (BPA 1993) concurred with this finding.

Have measurable objectives

Wildlife and wildlife habitat will benefit from the Horn Butte Project. Benefits will be quantified as Habitat Units, the unit of measure used in Habitat Evaluation Procedures. The project is expected to generate 2,000 to 3,500 protection and enhancement Habitat Units by the year 2004. Species response will also be measured using various biological monitoring protocols.

Protect high quality native habitat and/or species of concern

The Horn Butte project will protect relatively intact shrub-steppe and native grassland habitats. Much of the shrub-steppe habitat on the properties of interest are in excellent and near native conditions, but some portions are degraded by current grazing practices and intrusions of noxious weeds (e.g., cheatgrass, yellowstar thistle, knapweed). Most of these habitat types, which are very valuable to a specific guild of wildlife species, have been eliminated in the eco-region. Less than 1% of the native shrub-steppe habitat remains in the eco-region. This is primarily due to irrigated and dry-land agricultural conversion, but also to inundation of the Columbia River and associated urban expansion. The area provides important habitat for many State listed species including Washington ground squirrel (State Sensitive, Critical), loggerhead shrike (State Sensitive, Vulnerable), sage sparrow (State Sensitive, Critical), burrowing owl (State Sensitive, Critical), long-billed curlew (State Sensitive, Vulnerable), ferruginous hawk (State Sensitive, Critical), Swainson's hawk (State Sensitive, Vulnerable), grasshopper sparrow (State Sensitive, Vulnerable), and northern sagebrush lizard (State Sensitive, Vulnerable).

Mitigate losses in-place in-kind

The Horn Butte project will mitigate for wildlife losses on-site (it is about 30 miles from the John Day hydroelectric facility) and in-kind (restoration of naturally occurring shrub-steppe and riparian habitats).

Help protect or enhance natural ecosystems and species diversity over the long-term

Protection of shrub-steppe, grassland, and riparian habitats will occur at the Horn Butte project site in-perpetuity through land acquisition and conservation easement of private

and public lands.. The properties of interest are representative of most of the native plant communities that occur in the low elevation portion of the Basin. The Horn Butte area is one of only a few remaining sizable tracts of shrub-steppe habitat. A cooperative management plan with adjacent BLM lands will enhance the long-term values of this shrub-steppe ecosystem to wildlife. A variety of species are dependent on these types of habitats. Protection and restoration of habitat values will help ensure the future viability of these species. In addition to the species of concern listed above, the Horn Butte project will benefit other wildlife such as mule deer, eagles, and small mammals.

Complement the activities of the region's state and federal wildlife agencies and Indian tribes

Mitigation activities in Horn Butte area will complement wildlife management efforts on the nearby ODFW Willow Creek Wildlife Management Area (WMA). Adjacent BLM lands are also managed to maintain native shrub-steppe and grassland habitats and associated wildlife species. The project also complements the Confederated Tribes of the Umatilla Indian Reservation's Wanaket Wildlife Area. The goal of this nearby BPA mitigation project is to benefit wildlife through the enhancement of shrub-steppe and wetland habitats. The Umatilla National Wildlife Refuge, the Irrigon WMA, and the Cold Springs National Wildlife Refuge are other state and federal activities that are occurring in the region for the purpose of providing habitat for wildlife.

Encourage formation of partnerships to reduce project costs/eliminate duplicative activities

Partnerships will occur with the BLM, Trust for Public Lands (TPL), and The Nature Conservancy (TNC). TPL is currently conducting landowner negotiations. Partnership with the BLM to enhance their adjacent lands and participation of BLM in the management of acquisition/easements parcels will benefit the wildlife resource in the greater Horn Butte area and reduce direct Horn Butte project costs. Although it has not yet been determined who will hold title to and manage the Horn Butte mitigation site, staff and equipment affiliated with ODFW and BLM District offices will likely be used to reduce project costs. The project site manager, for which funds are being requested in this proposal, will also facilitate other BPA wildlife mitigation activities in the general area. Thus, personnel project costs will be shared.

Do not impose on Bonneville the funding responsibilities of others

Under Section 4h of the Northwest Power Act, BPA is responsible for funding mitigation for the loss of wildlife habitat caused by development of the Columbia Basin hydrosystem. BPA accomplishes this mitigation by funding projects consistent with the Council's FWP. Certain enhancement, operation, and maintenance activities are reasonable for BPA to fund while other activities may be outside BPA's obligation. *CBFWA's Guidelines for Enhancement, Operation, and Maintenance Activities for Wildlife Mitigation Projects* (CBFWA 1998) explains what activities are within BPA's funding responsibility. The acquisition/easement, enhancement, operations and maintenance, and monitoring and evaluation components of the Horn Butte project are consistent with CBFWA's guidelines and do not impose on BPA the funding responsibilities of others.

Address concerns over additions to public land ownership and impacts on local communities/consistency with local governments' comprehensive plans

Efforts to gain local and regional support for the Horn Butte project are being made. In-lieu taxes on acquired land will be paid by the managing entity (yet to be determined) to offset the lost county tax revenue. Management plans will be developed in concert with the BLM and ODFW to ensure consistency.

Use publicly owned land for mitigation or management agreements on private lands in preference to acquisition of private lands providing permanent protection or enhancement of wildlife habitat in the most cost-effective manner

The Horn Butte project will involve both the acquisition and easement of private lands, the enhancement of public BLM lands, and the easement of public lands. Management plans and agreements will be developed with the BLM for adjacent BLM properties to provide a well-managed contiguous tract of native habitats. The acquisition and enhancement of private land in the Horn Butte area is a cost-effective method to ensure benefits to wildlife in-perpetuity. Conservation easements will be pursued if acquisition is not possible.

Other

The Horn Butte project is consistent with all known local, state, federal, and tribal laws. The project is covered under the BPA Wildlife and Watershed Programmatic EIS documents (BPA 1997b, BPA 1997c, BPA 1997a). The project is consistent with several other areas of the Council's FWP. Specifically, it is consistent with Section 7.6 of the FWP which calls for watershed based habitat restoration focusing on protecting of wild and natural populations.

c. Relationships to other projects

Securing Wildlife Mitigation Sites – Oregon

This umbrella project proposal describes wildlife mitigation planning and implementation strategies for Oregon. It includes a list of specific mitigation projects that have been identified by the Oregon Wildlife Coalition as high priority sites. While all the individual projects are stand-alone projects, they collectively relate to one another in that their aim is to achieve full mitigation for documented wildlife losses in Oregon. The umbrella proposal and the specific sites within the umbrella, including the Horn Butte project, are sponsored by the Oregon Wildlife Coalition. Implementation of the umbrella will give the Coalition the flexibility to fund specific projects as they become available.

ODFW Mainstem Umbrella

This umbrella explains the management intent for anadromous fish, resident fish, and wildlife in and along the mainstem Columbia and Snake Rivers. Management objectives for key species and strategies and actions that will be implemented to meet those objectives are described. This umbrella provides the link between fish and wildlife mitigation goals and objectives at the subbasin level. The Horn Butte project falls within the geographic area of this umbrella proposal.

Assessing Oregon Trust Agreement Planning Project Using GAP Analysis

The purpose of this project was to develop strategies for implementing wildlife mitigation in Oregon. The results of the Oregon Trust Agreement Planning Project were re-evaluated using refined criteria. Potential mitigation sites were prioritized and the contribution of each site to target species and priority habitats was assessed. The Horn Butte area was identified as a high priority mitigation site. The results of the GAP Analysis project will continue to be used to identify, plan, and eventually implement priority projects throughout Oregon for the purpose of wildlife mitigation.

Oregon Trust Agreement Planning Project

Oregon's wildlife managers and tribes initiated this project as the means of achieving a trust agreement between Oregon and BPA for wildlife mitigation. A database containing information about potential mitigation sites and associated mitigation costs was compiled. This project lay the foundation for the GAP Analysis project.

Wanaket Wildlife Mitigation Project Operations and Maintenance

This wildlife mitigation project is managed by the Confederated Tribes of the Umatilla Indian Reservation to provide wildlife habitat. Mitigation credits are used to offset BPA's wildlife obligation at the McNary hydroelectric facility. This project has been on-going since 1993 and involves the enhancement of valuable shrub-steppe habitats, similar to the Horn Butte project. Information learned from this project will benefit mitigation efforts on the Horn Butte site.

Implementation of Willamette Basin Mitigation Program – Wildlife

The goal of this project is to cooperatively develop and implement measures to mitigate for wildlife habitat losses associated with the hydrosystem in the Willamette River basin. Specific mitigation activities (e.g., mitigation planning, land acquisition) have been implemented within this project for several years. The project functions similarly to the *Securing Wildlife Mitigation Sites – Oregon* umbrella project in that the planning, proposal, and implementation of specific mitigation activities is done in a coordinated manner.

d. Project history (for ongoing projects)

The Horn Butte project is an on-going project since FY99. Many important events led up to the Oregon Wildlife Coalition's proposal of the Horn Butte project.

During the mid 1980s, at the Council's direction, BPA funded studies to assess the wildlife losses attributable to the construction of and inundation by each major hydroelectric facility. The Council reviewed these assessments and amended its FWP to specify the number of Habitat Units that would constitute adequate mitigation for wildlife losses at each dam. BPA was authorized to proceed with mitigation projects.

Over the next ten years, the project proposal and implementation process evolved. One important component of this process was the joining of Oregon's wildlife manager's (i.e.,

the Oregon Wildlife Coalition). The Oregon Wildlife Coalition (the Coalition) formed with the intent of planning and implementing wildlife mitigation for the State of Oregon in a coordinated manner. For more details on the specific events that have occurred to date, refer to the Oregon Wildlife Coalition's *Securing Wildlife Mitigation Sites - Oregon umbrella proposal*.

One of the Coalition's first efforts to plan and implement wildlife mitigation in a coordinated manner was the initiation of the Oregon Trust Agreement Planning (OTAP) Project (BPA 1993). This was Oregon's pre-mitigation planning effort to assess and prioritize mitigation needs and opportunities in the state. A couple of years after completing this project it became evident that more mitigation planning was needed. The Coalition then began to develop strategies to implement wildlife mitigation in Oregon. This involved initiating a project to reassess and build upon the findings of the OTAP Project. This project, *Assessing OTAP Process Using GAP Analysis* (ODFW 1997) provided information on potential mitigation and estimated their contribution to the mitigation of target species and priority habitats.

Both the Oregon Trust Agreement Planning Project and the Assessing OTAP Process Using GAP Analysis project identified the Horn Butte area as a locale with priority wildlife mitigation needs and opportunities. For more information on these two Oregon wildlife mitigation planning efforts, refer to the Oregon Wildlife Coalition's *Securing Wildlife Mitigation Sites - Oregon umbrella proposal*.

Recognizing the benefits of addressing Oregon's mitigation needs and opportunities in a coordinated manner, the Oregon Wildlife Coalition developed and submitted a coordination and planning budget proposal in 1996 for FY97 BPA funds. This project was initiated in the fall of 1997. For the FY98 project proposal process, the Coalition proposed to identify a small group of potential mitigation projects throughout the state. This proposal had a small planning and coordination budget component. In 1997, the Oregon Wildlife Coalition further investigated potential mitigation sites and developed a short-list of priority sites. In 1998 for FY99 BPA funds, the Coalition submitted a more detailed *Securing Wildlife Mitigation Sites - Oregon umbrella proposal* that listed individual projects that would meet wildlife mitigation goals and objectives. The Horn Butte project was one of these individual projects requesting FY99 BPA funds.

In the FY99 proposal, two parcels of private land were identified in the Horn Butte area as potential mitigation sites. As the proposal outlined, one private property would likely be acquired while a conservation easement would be pursued on the another due to landowner preference. Opportunities to cooperatively enhance adjacent BLM lands were recognized. A budget of \$1 million was associated with the proposed acquisition and/or easement of private land. This project was approved for funding by the Council in September 1998. Efforts to implement this first approved phase of the Horn Butte project began in 1998. During 1998, partnerships have developed that will help facilitate implementation of the project. The Trust for Public Lands is taking the lead in negotiating with the private landowners. The Nature Conservancy is supportive of the project and may play a role in landowner negotiations and/or land acquisition.

Clearwater Land Exchange may also be involved at some level to help facilitate land acquisition, conservation easement, and partnerships with BLM. Working relationships have been developed with Prineville District BLM staff and discussions about enhancement opportunities on the BLM lands adjacent to the Horn Butte have occurred.

e. Proposal objectives

Objective 1: Assess Habitat Conditions/Develop Management Plans

Tasks - Assess existing habitat conditions of Horn Butte project area; Identify restoration needs and opportunities; Develop Restoration Plan, Operation and Maintenance Plan, and Monitoring and Evaluation Plan

Objective 2: Restore Habitat Values - Implement Restoration Plan

Tasks - Alter livestock grazing practices; Implement noxious weed control; Plant native grasses and shrubs; Secure public access

Objective 3: Maintain Habitat Values - Implement Operations and Maintenance Plan

Tasks - Maintain restored habitat conditions; Maintain fences and gates; Maintain informational signs

Objectives 4: Measure Effectiveness of Restoration Plan - Implement Monitoring and Evaluation Plan

Tasks - Evaluate overall habitat conditions using HEP survey methods, plant survey methods, and photo points; Compare noxious weed infestation levels to pre-control survey; Conduct biological monitoring to assess species response to enhancement

f. Methods

Objective 1: Assess Habitat Conditions/Develop Management Plans

Task a - Assess existing habitat conditions on the Horn Butte project area; identify restoration needs and opportunities

Methods:

- Conduct Habitat Evaluation Procedures to estimate existing wildlife values and to estimate future changes in wildlife values and benefits resulting from enhancement actions.
- Conduct surveys (i.e., T&E species, toxics, cultural) to fulfill NEPA requirements.
- Based on HEP and other survey results, identify restoration needs and opportunities.
- Coordinate with BLM to identify needs and opportunities on adjacent BLM lands.

Task b - Develop Restoration PlanMethods:

- Develop mitigation goals and objectives that address the findings of Objective 1, Task a.
- Develop management strategies to achieve mitigation goals and objectives for the Horn Butte site (e.g., land use practices, noxious weeds, native vegetation, public access).
- Refine timelines and budgets for Restoration Plan strategy implementation.
- Work with BLM to develop plan for adjacent BLM lands.

Task c - Develop Operations and Maintenance PlanMethods:

- Identify management activities needed to maintain enhance habitat values through time.
- Develop O&M protocol (timeline and budget).

Task d - Develop Monitoring and Evaluation PlanMethods:

- Identify needs and opportunities for monitoring and evaluation.
- Identify variables to be monitored and evaluated.
- Review available M&E methodologies (e.g., HEP, species surveys, plant community surveys) and select techniques that will best meet objectives. Select photo point sites.
- Select and define success criteria.
- Develop M&E protocol (timeline and budget).

Objective 2: Restore Habitat Values – Implement Restoration Plan**Task a - Alter livestock grazing practices**Methods:

- Implement portions the strategy for altering livestock grazing practices. Strategy will be based on the assessment of existing habitat conditions, restoration needs and opportunities, estimated changes in wildlife habitat values from the implementation of enhancement activities, and mitigation goals and objectives.
- Coordinate livestock strategy with adjacent landowners.
- Construct fence as necessary to facilitate grazing regime. This eventually will likely involve construction of about 8 miles of fence in conjunction with the project area.

Task b - Implement noxious weed controlMethods:

- Implement portions of the weed control strategy for project site. Strategy will be based on the assessment of existing habitat conditions,

restoration needs and opportunities, estimated changes in wildlife habitat values from the implementation of enhancement activities, and mitigation goals and objectives.

- Obtain necessary equipment and herbicides to accomplish weed control. This will involve investigating options for borrowing/renting equipment. Needed equipment will likely include backpacks, All Terrain Vehicles, and tractor-mounted spray units.
- Apply herbicides. Applications may be made 2-3 times per growing season depending on the target species' life cycles, growth tendencies, and success of initial application. About 400 acres will likely be initially treated.
- Consult and coordinate with Gilliam County Weed Control.

Task c - Plant native grasses and shrubs

Methods:

- Implement portions of the native vegetation planting strategy for project site. Strategy will be based on the assessment of existing habitat conditions, restoration needs and opportunities, estimated changes in wildlife habitat values from the implementation of enhancement activities, and mitigation goals and objectives.
- Obtain planting stock. This will likely involve collecting planting stock and/or seeds from the site or a similar site, and propagation of stock and seeds.
- Obtain necessary equipment to accomplish seeding and planting. This will involve investigating options for borrowing/renting equipment. Grasses are seeded with a harrow or broadcast seeded. Shrubs are planted as cuttings or bare-root stock.
- Seed and plant native species in areas identified in planting strategy.

Task d - Secure public access

Methods:

- Implement portions of the public access strategy. Strategy will be based on public access issues on and adjacent to the project site that were identified.
- Coordinate with adjacent landowners to ensure access to site is secured. This may involve the development of an access agreement between the management entity and the adjacent landowners.

Objective 3: Maintain Habitat Values - Implement Operations and Maintenance Plan

Task a – Conduct habitat enhancement activities as necessary

Methods:

- Implement management activities needed to maintain habitat values through time. Needed activities will be based on the assessment of

existing habitat conditions, restoration needs and opportunities, estimated changes in wildlife habitat values from the implementation of enhancement activities, and mitigation goals and objectives. Activities necessary to maintain habitat values may include noxious weed control, prescribed burning, use of livestock as a management tool, and re-seeding of native vegetation planting and seeding.

Task b - Maintain fences and gates

Methods:

- Repair fences and gates to protect project site from livestock trespass and to regulate visitor access. Maintenance will likely include repairing support structures, splicing wires, tightening wires, and replacing stays. About one mile of fence will likely need maintenance each year.
- Coordinate with BLM and other adjacent landowners to control access. This will involve discussions of public access needs and issues between the management entity and adjacent landowners, and the development of a public access agreement that addresses the various access issues.
- Report any violations to County law enforcement.

Task c - Maintain informational signs

Methods:

- Maintain informational signs through repair, painting, and replacement. This will involve updating the information as necessary through the life of the project.

Objectives 4: Measure Effectiveness of Restoration Plan - Implement Monitoring and Evaluation Plan

Task a - Evaluate changes in habitat conditions

Methods:

- Take regular photographs at photo points to visually document changes in habitat conditions through time.
- Conduct Habitat Evaluation Procedures to gather data on wildlife habitat values. Target species used in the existing conditions assessment will be used.
- Compare before and after Restoration Plan implementation HEP data. Success criteria will be applied to help assess the effectiveness of the enhancement activities.
- Calculate Habitat Units gained.
- Identify shortcomings if any and re-evaluate the Restoration Plan (i.e., apply adaptive management principles). Specific strategies to achieve mitigation goals and objectives may be adjusted during this process.

Task b - Compare noxious weed infestation levels to pre-control survey

Methods:

- Evaluate changes in noxious weed infestations.
- Identify shortcomings if any and re-evaluate the weed control component of the Restoration Plan (i.e., apply adaptive management principles). Specific weed control strategies may be adjusted during this process.
- Coordinate with Gilliam County Weed Control.

Task c - Conduct biological monitoring to assess species response to enhancement

Methods:

- Implement selected biological monitoring techniques to complement standard HEP habitat monitoring. Techniques will likely include assessment of plant communities (a modified HEP technique) and the monitoring individual species responses (e.g., neo-tropical bird surveys, aerial deer counts).
- Analyze data to assess species response to enhancement activities.
- Identify inadequate species responses and possible causes for such occurrences.
- Re-evaluate the Restoration Plan and species response variables (i.e., apply adaptive management principles).

Objective 5: Acquire/Ease Additional Lands in Horn Butte Area

Task a - Ease up to 22,000 acres of adjacent lands

Methods:

- Coordinate with entity who will facilitate easement negotiations
- Conduct necessary surveys
- Oversee easement of land

g. Facilities and equipment

No new facilities are anticipated to be necessary at this time. Existing facilities of the project implementers and cooperators will be used to minimize costs and to increase efficiency. For example, ODFW equipment associated with the Willow Creek WMA and District offices will be used. ODFW and BLM both have sufficient office and storage space, secretarial services, equipment, and computers to carry out this project's proposed tasks.

h. Budget

This proposal contains a budget that is higher than that projected in the FY99 proposal (Enhancement costs were estimated at \$15,000 for FY2000). However, overall project costs were underestimated mainly because the easement of up to 22,000 acres is a new

proposed activity. Also, personnel needs and associated costs were not addressed in the FY99 proposal. This FY2000 proposal fully considers and recognizes the need for personnel time to achieve proposed objectives. Out-year costs were also adjusted accordingly, taking into account future personnel needs. FY2000 funds will primarily be used to for personnel to conduct habitat assessments and to develop the management plan. Some initial restoration work will be done and a small portion of the FY2000 budget will go also towards O&M and M&E. Out-year costs will focus on restoration and O&M.

Personnel:

This funded position will coordinate the development and implementation of BPA projects in the north-central region of Oregon. The Horn Butte project site falls within this region. Staff time will be divided between the Horn Butte project and probably one or two other BPA wildlife mitigation projects. This personnel need is for FY2000 and out-years, though specific project responsibilities may change through time as projects move from the restoration phase into the O&M phase. Personnel will accomplish assessment of existing habitat conditions, development of the management plans, implementation of restoration activities, implementation of the O&M Plan, and implementation of the M&E Plan. Existing personnel will likely be assigned to work on BPA mitigation. Three-quarters of staff time will be funded by other programs.

Fringe Benefits

A fringe benefit rate of 38% is assumed. (ODFW's standard fringe benefit rate)

Services, Supplies, Materials, Non-Expendable Property

Included in this line item are fence materials, herbicides, signs, office supplies (pens, paper, etc.), printing costs, communications (cellular phone), film, and film development. Costs for fence materials and herbicides are expected to be low for FY2000 since the project focus will be on habitat assessment and development of management plans.

Capital acquisitions or improvements

Costs for the possible conservation easement of the adjacent 22,000 acres are requested.

NEPA

Since there is minimal ground-breaking work proposed with this project, NEPA costs are expected to be low.

Travel

Travel expenses include mileage, per dium, and limited travel to Portland to coordinate project management with the Oregon Wildlife Coalition and BPA. Vehicle rental expenses are not incorporated into this line item because it is assumed that existing agency vehicles will be used.

Indirect Costs

Indirect costs are assumed at a rate of 35.5% (ODFW's negotiated state/federal contract overhead rate).

Subcontractor

Contracting includes noxious weed control and native plant collection and propagation.

Section 9. Key personnel

Russ Morgan

Current Employer: ODFW

Title: Assistant District Wildlife Biologist, Heppner District

Current Responsibilities: Oversees management of all species throughout District

Education: B.S. Wildlife Biology, Oregon State Univ. 1986

Experience: 12 years experience; 6 years as Asst. District Biologist

Previous Employment: ODFW

Areas of Expertise: Specializes in shrub-steppe habitats and associated wildlife species

Relevant Accomplishments: Completed Columbia Basin shrub-steppe study

Anticipated Horn Butte Project Duties: Provide project oversight and management; possible mitigation site manager

Mark Henjum

Current Employer: ODFW

Title: Acting Regional Supervisor/Wildlife Diversity Biologist

Current Responsibilities: In charge of Region's diversity program

Education: B.S. Wildlife Biology, Oregon State Univ.

Certifications: Certified National Wildlife Society Wildlife Biologist

Experience: 23 years experience with ODFW

Previous Employment: ODFW

Areas of Expertise: Non-game species and associated habitats; large mammals

Anticipated Horn Butte Project Duties: Project oversight; coordination with region's diversity program

Susan Barnes

Current Employer: ODFW

Title: Columbia Basin Wildlife Mitigation Coordinator

Current Responsibilities: Coordinates Oregon's BPA wildlife mitigation efforts; facilitates the Oregon Wildlife Coalition; ODFW representative for CBFWA Wildlife Caucus

Education: B.S. Wildlife Management/Forestry, Univ. of New Hampshire 1991

Certifications: certified in Habitat Evaluation Procedures

Experience: 10 years wildlife experience

Areas of Expertise: Project development, coordination, and oversight; threatened and endangered species; NEPA

Previous Employment: Mason, Bruce & Girard, Inc. (environmental consulting firm); Self-employed environmental consultant (contractor with NPPC); Beak Consultants, Inc. (environmental consulting firm); U.S. Forest Service (Wildlife Biologist)

Anticipated Horn Butte Project Duties: Indirectly oversee project implementation; coordinate the project within the Coalition's umbrella project proposal.

Section 10. Information/technology transfer

Information transfer and exchange will be accomplished via telephone, email, and fax communication. Reports and plans will be distributed to all participating and interested entities via BPA and the Internet. HEP Evaluations, management plans, and monitoring and evaluation reports will be publicly available. Info will also be transferred through the CBFWA Wildlife Caucus forum as well as between participating agencies and organizations at occasional meetings. The media (e.g., newspapers, agency magazines) may be used to convey info to the public. Quarterly and annual reports will be prepared for BPA.

Congratulations!